



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,599	09/29/2003	John M. Vranish	GSC 14,207-2	6814

21872 7590 11/29/2004

NASA GODDARD SPACE FLIGHT CENTER
OFFICE OF PATENT COUNSEL
MAIL CODE 503
GREENBELT, MD 20771

EXAMINER

LEWIS, TISHA D

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,599

Applicant(s)

VRANISH, JOHN M.

Examiner

TISHA D. LEWIS

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 21-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The following is a first action on the merits of application serial no. 10/675,599 filed on September 29, 2003.

Drawings

The drawings filed on August 24, 2004 has been acknowledged.

Specification

The disclosure is objected to because of the following informalities:

-On the top page of the preliminary amendment filed September 29, 2003 next to Serial No.:, the serial number for the present application should be inserted instead of the parent application number.

-The patent number 6,626,792 for the parent application should be inserted after the filing date of the parent application under the heading "Related U.S. Application Data" in the preliminary amendment. Appropriate correction is required.

Claim Objections

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 27-29 has been renumbered 21-23, since the last number cancelled was 20, not 26.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 22 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22 recites the limitation "said roller crown" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 21-23 are rejected under 35 U.S.C. 102(b) as being unpatentable by Verge et al ('070), WO 97/18407, JP 59040056A and Cortreau et al ('700). Verge et al discloses a transmission having a first gear bearing (72) with a central axis, a first plurality of teeth (73) extending radially outward from the axis, the tooth forming a first contact point with another tooth (via 70) disposed a first distance from the axis, a first roller portion (78) forming a second contact point with another portion (54) disposed the same first distance, the teeth seem to form a crown shape wherein the top of the crown shape forms a third contact point with the top of another tooth set (via 70) disposed the

Art Unit: 3681

same first distance and wherein the contact points all have the same speed due to the integral configuration of the first teeth and first roller portion.

WO 97/18407 discloses a gear and roller having a first gear bearing (3) with a central axis (4), a first plurality of teeth (3a,b) extending radially outward from the axis, the tooth forming a first contact point with another tooth (2) disposed a first distance from the axis, a first roller portion (9) forming a second contact point with another portion (10) disposed the same first distance, the teeth seem to form a crown shape wherein the top of the crown shape forms a third contact point with the top of another tooth set (via 2) disposed the same first distance and wherein the contact points all have the same speed due to the integral configuration of the first teeth and first roller portion.

JP 59040056A discloses a transmission having a first gear bearing with a central axis, a first plurality of teeth (21, 22) extending radially outward from the axis, the tooth forming a first contact point with another tooth (5, 6) disposed a first distance from the axis, a first roller portion (2) forming a second contact point with another portion (4) disposed the same first distance, the teeth seem to form a crown shape wherein the top of the crown shape forms a third contact point with the top of another tooth set (via 5, 6) disposed the same first distance and wherein the contact points all have the same speed due to the integral configuration of the first teeth and first roller portion.

Cortreau et al discloses a transmission having a first gear bearing (26) with a central axis (10), a first plurality of teeth (30) extending radially outward from the axis, the tooth forming a first contact point with another tooth (via 40) disposed a first

Art Unit: 3681

distance from the axis, a first roller portion (32, 34) forming a second contact point with another portion (46) disposed the same first distance, the teeth seem to form a crown shape wherein the top of the crown shape forms a third contact point with the top of another tooth set (via 40) disposed the same first distance and wherein the contact points all have the same speed due to the integral configuration of the first teeth and first roller portion.

FACSIMILE TRANSMISSION

Submission of your response by facsimile transmission is encouraged. Group 3600's facsimile number is **(703) 872-9326 before final and 703-872-9327 after final**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see MPEP 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check **should not be** submitting by facsimile transmission separately from the check.

Responses submitted by facsimile transmission should include a Certificate of Transmission (MPEP 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office (Fax No. (703) 000-0000) on _____ (Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and MPEP 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only

Art Unit: 3681

cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Hamabe et al ('305), Morrow ('691), Igaku ('358), Matoba ('839), ('602), Nasvytis ('171), ('270), Rossman ('251), JP 57127146A.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TISHA D. LEWIS whose telephone number is 703-305-0921. The examiner can normally be reached on M-Thur 8 AM TO 3 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES A. MARMOR can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Application/Control Number: 10/675,599

Page 7

Art Unit: 3681

Tdl

November 23, 2004


TISHA LEWIS
PRIMARY EXAMINER
HU 3681 11/23/04